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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,048	01/16/2004	Yoshiyuki Sasaki	R2184.0293/P293	6124
24998 7590 03/07/2007 DICKSTEIN SHAPIRO LLP 1825 EYE STREET NW Washington, DC 20006-5403			EXAMINER GOMA, TAWFIK A	
			ART UNIT	PAPER NUMBER
			2627	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/07/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/758,048	Applicant(s) SASAKI, YOSHIYUKI	
	Examiner Tawfik Goma	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 7-9, 12, 14, 20-23 and 25 is/are pending in the application.
- 4a) Of the above claim(s) 4-6, 10, 11, 13, 15-19, 24 and 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7-9, 12, 14, 20-23 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Election/Restrictions

Applicant's election of claims 1-3, 7-9 12, 14, 20-23 and 25 with traverse is acknowledged.

Applicant's election with traverse of 1-3, 7-9 12, 14, 20-23 and 25 in the reply filed on 12/27/2006 is acknowledged. The traversal is on the ground(s) that there are only 26 claims in the application. This is not found persuasive because the claims are patentably distinct and serious burden would be on the examiner to examine all of the claims.

The requirement is still deemed proper and is therefore made FINAL.

Claim 4-6, 10-11, 13, 15-19, 24 and 26 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 12/26/2006.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 9 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 9 is drawn to a "program" *per se* as recited in the preamble and as such is non-

Art Unit: 2627

statutory subject matter. See MPEP § 2106.IV.B.1.a. Data structures not claimed as embodied in tangible computer readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed tangible computer readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. Similarly, computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 7-9, 12, 20 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakane US 6463021).

Regarding claim 1, Nakane discloses a recording method for recording data in a recording area of an information recording medium (fig. 10), comprising: a first step of determining whether to perform a defect detection process on at least a portion of the recording area in which the data are recorded based on a predetermined determination criterion pertaining to recording attribute information of the data (1, 7, fig. 10 and col. 6 lines 57-65).

Regarding claim 2, Nakane further discloses wherein the recording area includes an area on which the defect detection process is already performed at least once (col. 9 lines 64-67 through col. 10 lines 1-15). The defect detection process is performed for each sector in the recording area.

Regarding claim 7, Nakane further disclose wherein the defect detection process corresponds to a verification process (col. 10 lines 5-15).

Regarding claim 9, Nakane discloses a program that is implemented in an information recording apparatus that is adapted to record information on an information recording medium (fig. 1 and fig. 10), said program being run on a control computer of the information recording apparatus to realize: a first procedure of recording data in a recording area of the information recording medium in response to a request from an external source (2-5, fig. 10); and a second procedure of determining after the recording of the data whether to perform a defect detection process on at least a portion of the recording area in which the data are recorded based on a predetermined determination criterion pertaining to recording attribute information of the data (6-7, fig. 10 and col. 15 lines 9-19).

Art Unit: 2627

Regarding claim 12, Nakane discloses an information recording apparatus that is adapted to record information on an information recording medium (fig. 1), said apparatus comprising: recording means for recording data on the information recording medium in response to a recording request from an external apparatus (26, fig. 1); and determination means for determining after the recording of the data whether to perform a defect detection process on at least a portion of the recording area in which the data are recorded based on recording attribute information of the data (12, fig. 1 and figs. 2 and 10).

Regarding claim 20, Nakane further discloses wherein the defect detection process corresponds to a verification process (col. 10 lines 5-15).

Regarding claim 22, Nakane discloses a recording method for recording data in a recording area of an information recording medium (col. 1 lines 25-37 and fig. 10), comprising: performing a first verification process on at least a portion of the recording area (col. 1 lines 25-28-30); recording data in said portion of the recording area (6, fig. 10); and determining whether to perform a second verification process on said portion of the recording area based on whether a predetermined determination criterion has been met (7, 8 fig. 10 and col. 6 lines 57-65).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 14, 23, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakane (US 6463021) in view of Takasago (US 4730290).

Regarding claims 23 and 25, Nakane discloses a recording method for recording data in a recording area of an information recording medium, comprising: recording the data in at least a portion of the recording area (6, fig. 10); and determining whether to perform a verification process on the portion of the recording area based on a criteria (7, 8, fig. 10 and col. 6 lines 57-65. Nakane fails to disclose wherein the criteria is whether the size of the data is less than or equal to a threshold value. In the same field of endeavor, Takasago discloses performing a verification process if the size of the data is less than or equal to a threshold (col. 3 lines 27-60). The first verification process (col. 3 lines 27-36) is performed if the size is less than the value of T2. It would have been obvious to one of ordinary skill in the art to modify the method disclosed by Nakane by performing the verification process if the size is less than a threshold as taught by Takasago. The rationale is as follows: One of ordinary skill in the art at the time of the applicant's invention would have been motivated to check the size of the data in order to perform the correct verification process based on the size of the defective area (i.e. replacing only a sector and continuing to record data on the track, or replacing an entire track).

Regarding claims 3 and 14, Nakane fails to disclose wherein: the recording attribute information includes information on a data size of the data; and the determination criterion corresponds to a criterion of determining to perform the defect detection process when the data size of the data is less than or equal to a preset first threshold value. Takasago discloses performing a verification process if the size of the data is less than or equal to a threshold (col. 3 lines 27-60). The first verification process (col. 3 lines 27-36) is performed if the size is less than the value of T2. The rationale follows as in claims 23, 24 and 25 above.

Art Unit: 2627

Claims 8 and 21 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Nakane (US 6463021) in view of Wu (US 7080296).

Regarding claims 8 and 21, Nakane fails to disclose wherein the information recording medium conforms to a Mt. Rainier standard. Wu discloses wherein the information conforms to a Mt. Rainier standard (col. 1 lines 42-45). It would have been obvious to one of ordinary skill in the art to modify the medium disclosed by Nakane to have the information conform to a Mt. Rainier standard. The rationale is as follows: One of ordinary skill in the art at the time of the applicant's invention would have been motivated to provide a Mt. Rainier standard in order to allocate spare areas ahead of time in order to facilitate defect detection processing.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tawfik Goma whose telephone number is (571) 272-4206. The examiner can normally be reached on 8:30 am - 5:00 pm.

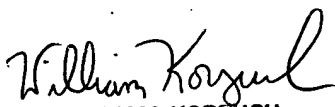
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2627

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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3/1/2007



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